

This document gives pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a Minor, Industrial permit. The discharge consists of storm water runoff from the operation of a yard waste composting operation. This permit action consists of updating the proposed effluent limits to reflect the current Virginia WQS (effective January 6, 2011) and updating permit language as appropriate. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9VAC25-260-00 et seq.

1. Facility Name and Mailing Address: Prince William County (PWC) - Yard Waste Composting Facility  
5 County Complex Court, Suite 250  
Woodbridge, VA 22192  
SIC Code : 5622 – Refuse Systems  
Facility Location: 14811 Dumfries Road  
Manassas, VA 20112  
County: Prince William  
Facility Contact Name: Mr. Bernie Osilka  
Telephone Number: (703) 792-7966
2. Permit No.: VA0086797  
Expiration Date of previous permit: February 13, 2012  
Other VPDES Permits associated with this facility: VAR051078 – PWC Sanitary Landfill  
Other Permits associated with this facility: NA  
E2/E3/E4 Status: E4
3. Owner Name: Prince William County  
Owner Contact/Title: Melissa Peacor / County Executive  
Telephone Number: (703) 792-6600
4. Application Complete Date: July 25, 2011  
Permit Drafted By: Susan Mackert  
Date Drafted: October 24, 2011  
Draft Permit Reviewed By: Alison Thompson  
Date Reviewed: November 8, 2011  
WPM Review By: Bryant Thomas  
Date Reviewed: December 8, 2011  
Public Comment Period : Start Date: January 12, 2012  
End Date: February 10, 2012
5. Receiving Waters Information:  
Receiving Stream Name : Two UTs to Powells Creek  
Stream Code: Outfall 001 1aXHI  
Stream Code: Outfall 002 1aXHH  
River Mile: Outfall 001 0.44  
River Mile: Outfall 002 1.93  
Drainage Area: Outfall 001 0.17 square miles  
Drainage Area: Outfall 002 1.07 square miles

The information below is applicable to both unnamed tributaries to Powells Creek.

Stream Basin:	Potomac River	Subbasin:	Potomac River
Section:	7	Stream Class:	III
Special Standards:	b	Waterbody ID:	VAN-A26R
7Q10 Low Flow:	0 MGD	7Q10 High Flow:	0 MGD
1Q10 Low Flow:	0 MGD	1Q10 High Flow:	0 MGD
30Q10 Low Flow:	0 MGD	30Q10 High Flow:	0 MGD
Harmonic Mean Flow:	0 MGD	30Q5 Flow:	0 MGD

It is staff's best professional judgement that based on a drainage area of 5 square miles or less, critical flows will be equal to 0.

303(d) Listed:	Receiving Streams - No	
303(d) Listed:	Downstream (Lake Montclair) – Yes (fish consumption)	
303(d) Listed:	Downstream (Non-Tidal Powells Creek) – Yes (recreation)	
303(d) Listed:	Downstream (Tidal Powells Creek) – Yes (fish consumption)	
TMDL Approved:	Receiving Streams - NA	Date TMDL Approved: NA
TMDL Approved:	Downstream (Lake Montclair)	Date TMDL Approved: 10-31-07 (PCBs)
TMDL Approved:	Downstream (Non-Tidal Powells Creek)	Date TMDL Approved: NA
TMDL Approved:	Downstream (Tidal Powells Creek)	Date TMDL Approved: 10-31-07 (PCBs)

## 6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

<input checked="" type="checkbox"/> State Water Control Law	<input type="checkbox"/> EPA Guidelines
<input checked="" type="checkbox"/> Clean Water Act	<input checked="" type="checkbox"/> Water Quality Standards
<input checked="" type="checkbox"/> VPDES Permit Regulation	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> EPA NPDES Regulation	

7. Licensed Operator Requirements: NA

8. Reliability Class: NA

## 9. Permit Characterization:

<input type="checkbox"/> Private	<input type="checkbox"/> Effluent Limited	<input type="checkbox"/> Possible Interstate Effect
<input type="checkbox"/> Federal	<input checked="" type="checkbox"/> Water Quality Limited	<input type="checkbox"/> Compliance Schedule Required
<input type="checkbox"/> State	<input checked="" type="checkbox"/> Toxics Monitoring Program Required	<input type="checkbox"/> Interim Limits in Permit
<input checked="" type="checkbox"/> County	<input type="checkbox"/> Pretreatment Program Required	<input type="checkbox"/> Interim Limits in Other Document
<input type="checkbox"/> TMDL	<input type="checkbox"/> POTW	

## 10. Wastewater Sources and Treatment Description:

The Prince William County Yard Waste Composting Facility receives yard waste materials such as brush clippings, tree trimmings, pallets, and tree logs (no larger than 24" in diameter). These materials are received from Prince William County residents, County roll-off trucks, private solid waste collectors, general landscape contractors, and other jurisdictions authorized by the County. The facility is owned by Prince William County and operated by Eastern Clearing, Incorporated of Bealeton, Virginia.

Materials received by the facility are placed into a tub or horizontal grinder. Mulch is placed into windrows with firebreaks between the windrows as required by state and local regulations. Temperatures are monitored weekly and/or bi-weekly depending on weather and pile size. Ground mulch is turned as necessary to reduce heat and fire potential.

Outfall 001 is associated with the south basin which has a drainage area of approximately 3.2 acres. Potentially contaminated storm water from the composting area is slowed by gabion baskets and rip-rap which also serves to prevent mulch from entering the basin. Once in the basin, storm water is allowed to settle prior to discharge via Outfall 001 to an unnamed tributary to Powells Creek.

Outfall 002 is associated with the north basin which has a drainage area of approximately 11.5 acres. The north basin is comprised of two ponds in series. Potentially contaminated storm water from the composting area enters the first pond which acts as a sedimentation basin and then flows to the second pond which serves as a retention basin. Discharge is from the second pond via Outfall 002 to an unnamed tributary to Powells Creek.

Additionally, the facility has received silt from the following locations in the last three years – Lake Montclair and sedimentation ponds from the City of Manassas.

The yard waste composting facility sits adjacent to the Prince William County Sanitary Landfill (VAR051078). A suitable buffer exists between the two facilities such that there is no potential for runoff from the landfill to enter either the north or south basin of the yard waste composting facility.

See Attachment 1 for the NPDES Permit Rating Worksheet.

See Attachment 2 for a facility schematic/diagram.

TABLE 1 – Outfall Description

Outfall Number	Discharge Sources	Treatment	Average Flow	Outfall Latitude and Longitude
001	Industrial Storm Water	Settling	Variable	38° 38' 20? N 77° 25' 38? W
002	Industrial Storm Water	Settling	Variable	38° 38' 40? N 77° 25' 41? W

See Attachment 3 for (Independent Hill, DEQ #194B) topographic map.

#### 11. Sludge Treatment and Disposal Methods:

The Prince William County Yard Waste Composting Facility is a county owned facility that receives yard waste materials from sources identified in Section 10 of the Fact Sheet. The facility does not produce sewage sludge and does not treat domestic sewage.

#### 12. Discharges, Intakes, Monitoring Stations, Other Items in Vicinity of Discharge :

TABLE 2

The discharge and monitoring stations listed below are located within the waterbody VAN-A26R and either discharge to or are located on Powells Creek or an unnamed tributary to Powells Creek. See Attachment 4 for a list of all other facilities and monitoring stations located within the waterbody VAN-A26R.

1aPOW006.11	DEQ ambient monitoring station located on Powells Creek at the Northgate Drive crossing approximately 7.1 rivermiles downstream from the outfall locations.
1aPOW009.99	DEQ ambient monitoring station located on Powells Creek at the Route 643 bridge crossing (Spriggs Road) approximately 2.83 rivermiles downstream from Outfall 001 and 2.71 rivermiles downstream from Outfall 002.
VAR051078	Prince William County Sanitary Landfill (UT to Powells Creek)
VAR052034	DP Auto Parts (UT to Powells Creek)

**13. Material Storage:**

TABLE 3 - Material Storage		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures
Diesel Fuel	1000 gallons	Double walled fully contained AST

**14. Site Inspection:**

Performed by Sharon Allen on August 23, 2011. The site visit confirms that the application package received on July 22, 2011, is accurate and representative of actual site conditions.

**15. Receiving Stream Water Quality and Water Quality Standards:**a) Ambient Water Quality Data

The nearest Department of Environmental Quality ambient monitoring station, 1aPOW009.99, is located on Powells Creek at the Route 643 bridge crossing (Spriggs Road) approximately 2.83 rivermiles downstream from Outfall 001 and 2.71 rivermiles downstream from Outfall 002. The receiving stream, an unnamed tributary to Powells Creek, is not listed on the current 303(d) list.

The 2010 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report (IR) gives an impaired classification for the following downstream locations:

- Fish Consumption Use (PCBs)

Lake Montclair: Excursions above the water quality criterion based fish tissue value (TV) of 20 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in fish tissue were recorded in three species of fish: carp, brown bullhead catfish, and channel catfish collected at monitoring station 1aPOW009.08. As a result, the fish consumption use is considered impaired.

Powells Creek (Tidal): The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. The advisory, dated 4/19/99, and modified 12/13/04 and 10/7/09, limits consumption of bullhead catfish, channel catfish less than eighteen inches long, largemouth bass, anadromous (coastal) striped bass, sunfish species, smallmouth bass, white catfish, white perch, gizzard shad, and yellow perch to no more than two meals per month. The advisory also bans consumption of American eel, carp and channel catfish greater than eighteen inches long. The affected area includes the tidal portions of the following tributaries and embayments from the I-395 bridge (above the Woodrow Wilson Bridge) to the Potomac River Bridge at Route 301: Fourmile Run, Hunting Creek, Little Hunting Creek, Pohick Creek, Accotink Creek, Occoquan River, Neabsco Creek, Powells Creek, Quantico Creek, Chopawamsic Creek, Aquia Creek, and Potomac Creek.

- Fish Consumption Use (Mercury)

Lake Montclair: Excursions above the water quality criterion based fish TV of 300 ppb for mercury in fish tissue were recorded in three species of fish: largemouth bass, channel catfish, and black crappie collected at monitoring station 1aPOW009.08. As a result, the fish consumption use has been designated as impaired.

- Fish Consumption Use (Benzo(k)fluoranthene)

Powells Creek (Tidal): This segment remains on the impaired waters list for the fish consumption use because of 1996 fish tissue data. Exceedances of the water quality standard criterion based TV of 15 ppb for benzo(k)fluoranthene in fish tissue were recorded during a 1996 sampling event in two species: largemouth bass and sunfish.

- Recreation Use

Powells Creek (Non-Tidal): Sufficient excursions from the maximum *E. coli* bacteria criterion (2 of 13 samples – 15.4%) were recorded at DEQ's ambient monitoring station 1aPOW006.11 at the Northgate Drive crossing to assess this stream as not supporting of the recreation use goal for the 2010 water quality assessment.

The following Total Maximum Daily Load (TMDL) schedules are planned.

- Fish Consumption Use Tidal Powells Creek (Benzo(k)fluoranthene) – 2014
- Recreation Use Non-Tidal Powells Creek (Bacteria) – 2014
- Fish Consumption Use Lake Montclair (Mercury) – 2022

The following Total Maximum Daily Load (TMDL) schedules have been completed.

- Fish Consumption Use Lake Montclair (PCBs) – October 31, 2007
- Fish Consumption Use Tidal Powells Creek (PCBs) – October 31, 2007

The full planning statement is found as Attachment 5.

b) Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving streams, two unnamed tributaries to Powells Creek, are located within Section 7 of the Potomac River Basin, and classified as Class III waters.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C, and maintain a pH of 6.0-9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving streams.

Ammonia:

The fresh water, aquatic life Water Quality Criteria for Ammonia is dependent on the instream temperature and pH. The 90<sup>th</sup> percentile temperature and pH values are used because they best represent the critical conditions of the receiving stream. The 7Q10 and 1Q10 of the receiving stream are 0.0 MGD. In cases such as this, effluent pH and temperature data may be used to establish the ammonia water quality standard.

Per the facility's application, Outfall 001 discharges on average twice per month while Outfall 002 discharges less than twice per year. As stated in Section 10 above, both outfalls receive storm water runoff from composting operations. As such, the characteristics of the storm water entering the unnamed tributary to Powells Creek from each outfall would be expected to be similar. Because of the infrequent discharge of Outfall 002, it is staff's best professional judgement that with this reissuance monitoring data from Outfall 001 be used to determine water quality criteria and that the criteria be applied to both Outfall 001 and Outfall 002.

The 90th percentile pH was derived from Outfall 001 DMR submissions dated March 2007 to August 2011 and was determined to be 7.9 S.U. Although this pH value is not significantly different from the 90th percentile pH utilized during the previous reissuance (7.5 S.U.), the newly derived value shall be used.

Because the facility is not required to monitor temperature, a default value of 25°C was used. The ammonia water quality standards calculations are shown in Attachment 6.

Ammonia is a parameter of concern due to the yard waste composting operation. As such, there is reasonable potential to exceed the ammonia criteria. Because the discharge is comprised solely of storm water, it is staff's best professional judgment that monitoring endpoints be developed for ammonia rather than establishing numeric effluent limits. Please see Section 17.b of the Fact Sheet for further discussion on storm water outfall methodology.

Metals Criteria:

The Water Quality Criteria for some metals are dependent on the receiving stream's hardness (expressed as mg/L calcium carbonate). There is no hardness data for this facility. Staff guidance suggests using a default hardness value of 50 mg/L CaCO<sub>3</sub> for streams east of the Blue Ridge. The hardness-dependent metals criteria in Attachment 6 are based on this default value.

c) Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes, and special standards for surface waters of the Commonwealth of Virginia. The receiving streams, two unnamed tributaries to Powells Creek, are located within Section 7 of the Potomac River Basin. This section has been designated with a special standard of "b".

Special Standard "b" (Potomac Embayment Standards) established effluent standards for all sewage plants discharging into Potomac River embayments and for expansions of existing plants discharging into non-tidal tributaries of these embayments. 9VAC25-415, Policy for the Potomac Embayments controls point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River, and their tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 bridge in King George County. The regulation sets effluent limits for BOD<sub>5</sub>, total suspended solids, phosphorus, and ammonia, to protect the water quality of these high profile waterbodies. The Potomac Embayment Standards are not applied to this discharge as the facility is not a sewage treatment plant and the discharge does not contain the pollutants of concern in appreciable amounts.

d) Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched on October 4, 2011, for records to determine if there are threatened or endangered species in the vicinity of the discharge. The following threatened or endangered species were identified within a 2 mile radius of the discharge: Brook Floater, Wood Turtle, Upland Sandpiper, Loggerhead Shrike, Henslow's Sparrow, Bald Eagle, and Migrant Loggerhead Shrike. The limits proposed in this draft permit are protective of the Virginia Water Quality Standards and protect the threatened and endangered species found near the discharge.

**16. Antidegradation (9VAC25-260-30):**

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving streams have been classified as Tier 1 based on the stream having a 7Q10 and 1Q10 of zero. It is staff's best professional judgment that these streams are Tier I. The proposed permit limits and conditions have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

**17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:**

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLA) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLA's are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency, and statistical characteristics of the effluent data.

a) Effluent Screening:

Effluent data obtained from DMR submissions (April 2007 – September 2011) and the permit application has been reviewed and determined to be suitable for evaluation.

The following pollutant requires a wasteload allocation analysis: Ammonia.

b) Mixing Zones and Wasteload Allocations (WLAs):

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f)(Q_s)] - [(C_s)(f)(Q_s)]}{Q_e}$$

Where:

WLA	=	Wasteload allocation
C <sub>o</sub>	=	In-stream water quality criteria
Q <sub>e</sub>	=	Design flow
Q <sub>s</sub>	=	Critical receiving stream flow (1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; 30Q10 for ammonia criteria; harmonic mean for carcinogen-human health criteria; and 30Q5 for non-carcinogen human health criteria)
f	=	Decimal fraction of critical flow
C <sub>s</sub>	=	Mean background concentration of parameter in the receiving stream.

The water segments receiving the discharge via Outfall 001 and Outfall 002 are considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C<sub>o</sub>.

c) Effluent Limitations Toxic Pollutants, Outfall 001 and Outfall 002 –

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

## 1) Ammonia as N:

Data analysis does not indicate the need for an Ammonia limit (Attachment 6). However, ammonia is a parameter of concern due to the yard waste composting operation. As such, screening (i.e., decision) criteria for Ammonia have been established at 2 times the acute criteria. Please see Section 17.b of the Fact Sheet for further discussion on storm water outfall methodology.

Based on pH of 7.9 S.U. and a calculated Acute Criteria of 10 mg/L for Ammonia (Attachment 6), the 2x Acute Criteria Monitoring End Point for this reissuance is 20 mg/L. The monitoring frequency of once per quarter (1/3M) shall be carried forward with this reissuance.

Should storm water data exceed monitoring end points, the permittee shall reexamine the effectiveness of the SWPPP and any best management practices (BMPs) in use.

d) Effluent Limitations and Monitoring, Outfall 001 and Outfall 002 – Conventional and Non-Conventional Pollutants

Monitoring for BOD<sub>5</sub> once per month (1/M) shall be carried forward with this reissuance. Consistent with DEQ Guidance Memo 96-00 effluent limits are not proposed.

Monitoring for TSS once per month (1/M) shall be carried forward with this reissuance. Consistent with DEQ Guidance Memo 96-00 effluent limits are not proposed.

No changes to established pH limitations are proposed. As such, a minimum limit of 6.0 S.U. and a maximum limit of 9.0 S.U. shall be carried forward with this reissuance with monitoring once per month (1/M). Limitations for pH are set at the water quality criteria.

Monitoring for Total Phosphorus once per quarter (1/3M) shall be carried forward with this reissuance. Consistent with DEQ Guidance Memo 96-00 effluent limits are not proposed.

e) Effluent Limitations, Outfall 001 and Outfall 002 – Storm Water Only Pollutants.

These storm water discharges are considered intermittent and as such, the only concern would be acute water quality impacts. The duration of this discharge is not expected to occur for four or more consecutive days (96 hours). Therefore, only the acute criteria need to be addressed. Water Quality Criteria for human health (and chronic toxicity to a lesser degree) are based upon long term, continuous exposure to pollutants from effluents, and storm water discharges are short term and intermittent. Therefore, it is believed that the human health and chronic criteria are not applicable to storm water discharges.

Screening (i.e., decision) values expressed as monitoring end-points have been established at two times the acute water quality criterion established in the Virginia Water Quality Standards (9VAC25-260 et.seq.). There two primary reasons the end-points are established at two times the criterion. First, the acute criteria is defined as one-half of the final acute value (FAV) for a specific toxic pollutant. The FAV is determined from exposure of the specific toxicant to a variety of aquatic species, and is based on the level of a chemical or mixture of chemicals that does not allow the mortality, or other specified response, of aquatic organisms. These criteria represent maximum pollutant concentration values, which when exceeded, would cause acute effects on aquatic life in a short time period.

Second, if it is raining a sufficient amount to generate a discharge of storm water, it is assumed that the receiving stream flow will be greater than the critical flows of zero million gallons per day for intermittent streams due to storm water runoff within the stream's drainage area. In recognition of the FAV and the dilution caused by the rainfall, the monitoring end points were calculated by multiplying the acute Water Quality Criteria by two (2). The acute criterion and monitoring end-points established in the permit are presented in Table 4.

These monitoring end-point screening values are applied solely to identify those pollutants that should be given special emphasis during development of the Storm Water Pollution Prevention Plan (SWPPP). Storm water outfall data (pollutant specific) submitted by the permittee which are above the established monitoring end-point levels requires monitoring in Part I.A. of the permit for that specific outfall and pollutant. Should storm water outfall monitoring data exceed the established monitoring end point, the permittee shall reexamine the effectiveness of the SWPPP and BMPs in use and modify as necessary to address any deficiencies that caused the exceedances. Derivation of the decision criteria and a comparison of the monitoring end-points and effluent data for this outfall are provided in Attachment 6.



TABLE 4 – Monitoring End Points		
Parameter	Acute Criteria	Monitoring End Point 2 x Acute Criteria
Ammonia, as N	10 mg/L	20 mg/L

f) Effluent Limitations and Monitoring Summary.

The effluent limitations are presented in the following table. Limits were established for pH.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual.

**18. Antibacksliding:**

All limits in this permit are at least as stringent as those previously established. Backsliding does not apply to this reissuance.

**19a. Effluent Limitations/Monitoring Requirements: Outfall 001 (Industrial Storm Water from Yard Waste Composting Operations)**

Average flow is variable depending on precipitation.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/M	Estimate
pH	2	NA	NA	6.0 S.U.	9.0 S.U.	1/M	Grab
Total Suspended Solids (TSS)	1	NA	NA	NA	NL mg/L	1/M	Grab
BOD <sub>5</sub>	1	NA	NA	NA	NL mg/L	1/M	Grab
Ammonia, as N	1,2	NA	NA	NA	NL mg/L	1/3M <sup>(a)</sup>	Grab
Total Phosphorus	1,2	NA	NA	NA	NL mg/L	1/3M <sup>(a)</sup>	Grab
Acute Toxicity – <i>C. dubia</i> (TU <sub>d</sub> )	1	NA	NA	NA	NL	1/5YR <sup>(b)</sup>	Grab
Acute Toxicity – <i>P. promelas</i> (TU <sub>p</sub> )	1	NA	NA	NA	NL	1/5YR <sup>(b)</sup>	Grab

The basis for the limitations codes are: MGD = Million gallons per day.

1/M = Once every month in which a discharge occurs.

1. Best Professional Judgement

NA = Not applicable.

1/3M = Once every three months.

2. Water Quality Standards

NL = No limit; monitor and report.

1/5YR = Once every five years.

S.U. = Standard units.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

- The quarterly monitoring periods shall be January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31. The DMR shall be submitted no later than the 10<sup>th</sup> day of the month following the monitoring period (April 10, July 10, October 10, and January 10, respectively).
- The acute toxicity testing shall be conducted during the third year of the permit term (January 1, 2015 – December 31, 2015). The DMR and toxicity report shall be submitted no later than January 10, 2016.

**19b. Effluent Limitations/Monitoring Requirements: Outfall 002 (Industrial Storm Water from Yard Waste Composting Operations)**

Average flow is variable depending on precipitation.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/M	Estimate
pH	2	NA	NA	6.0 S.U.	9.0 S.U.	1/M	Grab
Total Suspended Solids (TSS)	1	NA	NA	NA	NL mg/L	1/M	Grab
BOD <sub>5</sub>	1	NA	NA	NA	NL mg/L	1/M	Grab
Ammonia, as N	1,2	NA	NA	NA	NL mg/L	1/3M <sup>(a)</sup>	Grab
Total Phosphorus	1,2	NA	NA	NA	NL mg/L	1/3M <sup>(a)</sup>	Grab
Acute Toxicity – <i>C. dubia</i> (TU <sub>a</sub> )	1	NA	NA	NA	NL	1/5YR <sup>(b)</sup>	Grab
Acute Toxicity – <i>P. promelas</i> (TU <sub>a</sub> )	1	NA	NA	NA	NL	1/5YR <sup>(b)</sup>	Grab

The basis for the limitations codes are: MGD = Million gallons per day.

1/M = Once every month in which a discharge occurs.

1. Best Professional Judgement

NA = Not applicable.

1/3M = Once every three months.

2. Water Quality Standards

NL = No limit; monitor and report.

1/5YR = Once every five years.

S.U. = Standard units.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

- a. The quarterly monitoring periods shall be January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31. The DMR shall be submitted no later than the 10<sup>th</sup> day of the month following the monitoring period (April 10, July 10, October 10, and January 10, respectively).
- b. The acute toxicity testing shall be conducted during the third year of the permit term (January 1, 2015 – December 31, 2015). The DMR and toxicity report shall be submitted no later than January 10, 2016.

**20. Other Permit Requirements:**

- a) Part I.B. of the permit contains quantification levels and compliance reporting instructions. 9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.
- b) Permit Section Part I.C., details the requirements for the Whole Effluent Toxicity Program.

The VPDES Permit Regulation at 9VAC25-31-210 requires monitoring and 9VAC25-31-220.I, requires limitations in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Law and the Clean Water Act. A Whole Effluent Toxicity Program is imposed for municipal facilities with a design rate >1.0 MGD, with an approved pretreatment program or required to develop a pretreatment program, or those determined by the Board based on effluent variability, compliance history, Instream Waste Concentration (IWC), and receiving stream characteristics.

The Prince William County Yard Waste Composting Facility is an industrial discharger with an effluent that may be potentially toxic. The previous permit (2007 – 2012) required the facility to conduct acute testing once during the five year permit term using *C. dubia* and *P. promelas* as the test species. Testing was conducted in April 2008, and the test results indicated that the effluent sample exhibited no acute toxicity to the test organisms.

It is staff's best professional judgement that the permittee continue to conduct acute testing once during the third year of the permit term (January 1, 2015 – December 31, 2015) using *C. dubia* and *P. promelas* as the test species.

- c) Permit Section Part I.D. details the requirements of a Storm Water Management Plan.

Industrial storm water discharges may contain pollutants in quantities that could adversely affect water quality. Storm water discharges which are discharged through a conveyance or outfall are considered point sources and require coverage by a VPDES permit. The primary method to reduce or eliminate pollutants in storm water discharges from an industrial facility is through the use of best management practices (BMPs). Storm Water Management Plan requirements are derived from the VPDES General Permit for Storm Water Discharges Associated with Industrial Activity, 9VAC25-151 et seq.

**21. Other Special Conditions:**

- a) O&M Manual Requirement. Required by VPDES Permit Regulation, 9VAC25-31-190.E. The permittee shall submit for approval a revised Operations and Maintenance (O&M) Manual or a statement confirming the accuracy and completeness of the current O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO) by May 14, 2012. Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit
- b) Water Quality Criteria Reopener. The VPDES Permit Regulation at 9VAC25-31-220 D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

- c) Nutrient Reopener. 9VAC25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade. 9VAC25-31-390 A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.
- d) Notification Levels. The permittee shall notify the Department as soon as they know or have reason to believe:
- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter;
    - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
    - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
    - (4) The level established by the Board.
  - b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - (1) Five hundred micrograms per liter;
    - (2) One milligram per liter for antimony;
    - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
    - (4) The level established by the Board.
- e) Materials Handling/Storage. 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.
- f) Storm Water Monitoring. Storm water monitoring end points have been established with this permit reissuance for all parameters requiring a wasteload allocation analysis. The permittee shall conduct all storm water monitoring in accordance with Part I.A of the permit.

<u>Parameter</u>	<u>Monitoring End Point</u>
Ammonia, as N	20 mg/L

Should the storm water monitoring results for a given parameter exceed the end point below, the permittee shall reexamine the effectiveness of the SWPPP and BMPs in use and within 30 days modify as necessary to address any deficiencies that caused the exceedances. Resampling for a parameter that exceeded a monitoring end point shall occur within 30 days of any SWPPP or BMP modification. Storm water monitoring data submitted by the permittee above an established monitoring end point does not constitute a violation of the permit.

Permit Section Part II. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

**22. Changes to the Permit from the Previously Issued Permit:**

- a) Special Conditions:
  - 1. A storm water monitoring special condition has been added with this reissuance
- b) Monitoring and Effluent Limitations:
  - 1. Storm water monitoring requirements have been updated to be consistent with the current VPDES General Permit for Storm Water Discharges Associated with Industrial Activity.
  - 2. A monitoring end point value has been established and included in the permit with this reissuance for Ammonia, as N.

**23. Variances/Alternate Limits or Conditions: NA****24. Public Notice Information:**

First Public Notice Date: January 11, 2012

Second Public Notice Date: January 18, 2012

Public Notice Information is required by 9VAC25-31-280 B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3853, susan.mackert@deq.virginia.gov. See Attachment 7 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

**25. 303 (d) Listed Stream Segments and Total Max. Daily Loads (TMDL):**

The receiving stream, an unnamed tributary to Powells Run, is not listed on the current 303(d) list. However, the 2010 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report (IR) gives an impaired classification for downstream locations of Powells Run and Lake Montclair. TMDLs have been completed to address the aquatic life and recreation impairments. The facility was not given a waste load allocation (WLA) in the TMDL as it was not expected to discharge the pollutant of concern.

TMDL Reopener: This special condition is to allow the permit to reopened if necessary to bring it in compliance with any applicable TMDL that may be developed and approved for the receiving stream.

**26. Additional Comments:**

Previous Board Action(s): None.

Staff Comments: With the reissuance of the permit in 2007, the EPA Guidelines box was checked in Section 6 of the Fact Sheet (Statutory or Regulatory Basis for Special Conditions and Effluent Limitations). This item was not checked with this reissuance as Federal Effluent Guidelines are not applicable to this classification of industrial discharger.

Public Comment: No comments were received during the public notice.

EPA Checklist: The checklist can be found in Attachment 8.

## Fact Sheet Attachments – Table of Contents

### Prince William County Yard Waste Composting Facility VA0086797

2012 Reissuance

Attachment 1	NPDES Permit Rating Worksheet
Attachment 2	Facility Flow Diagram
Attachment 3	Topographic Map
Attachment 4	Waterbody Discharges
Attachment 5	Planning Statement
Attachment 6	Wasteload Allocation Analysis – Limit Derivation
Attachment 7	Public Notice
Attachment 8	EPA Checklist

## NPDES PERMIT RATING WORK SHEET

VPDES NO. : VA0086797

- ☒ Regular Addition  
☐ Discretionary Addition  
☐ Score change, but no status Change  
☐ Deletion

Facility Name: Prince William County Yard Waste Composting Facility

City / County: Manassas / Prince William

Receiving Water: Two UTs to Powells Creek

Waterbody ID: VAN-A26R

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)  
 2. A nuclear power Plant  
 3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

- ☐ YES; score is 700 (stop here)  
☒ NO; (continue)

☐ Yes; score is 600 (stop here) ☒ NO; (continue)

**FACTOR 1: Toxic Pollutant Potential**

PCS SIC Code: \_\_\_\_\_ Primary Sic Code: 5622 Other Sic Codes: \_\_\_\_\_  
 Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input checked="" type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	15	<input type="checkbox"/> 7.	7	35
<input type="checkbox"/> 1.	1	5	<input type="checkbox"/> 4.	4	20	<input type="checkbox"/> 8.	8	40
<input type="checkbox"/> 2.	2	10	<input type="checkbox"/> 5.	5	25	<input type="checkbox"/> 9.	9	45
			<input type="checkbox"/> 6.	6	30	<input type="checkbox"/> 10.	10	50
Code Number Checked:								0
<b>Total Points Factor 1:</b>								<b>0</b>

**FACTOR 2: Flow/Stream Flow Volume** (Complete either Section A or Section B; check only one)

## Section A – Wastewater Flow Only considered

Wastewater Type (see Instructions)	Code	Points
Type I: Flow < 5 MGD	<input type="checkbox"/> 11	0
Flow 5 to 10 MGD	<input type="checkbox"/> 12	10
Flow > 10 to 50 MGD	<input type="checkbox"/> 13	20
Flow > 50 MGD	<input type="checkbox"/> 14	30
Type II: Flow < 1 MGD	<input type="checkbox"/> 21	10
Flow 1 to 5 MGD	<input type="checkbox"/> 22	20
Flow > 5 to 10 MGD	<input type="checkbox"/> 23	30
Flow > 10 MGD	<input type="checkbox"/> 24	50
Type III: Flow < 1 MGD	<input type="checkbox"/> 31	0
Flow 1 to 5 MGD	<input type="checkbox"/> 32	10
Flow > 5 to 10 MGD	<input type="checkbox"/> 33	20
Flow > 10 MGD	<input type="checkbox"/> 34	30

## Section B – Wastewater and Stream Flow Considered

Wastewater Type (see Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow	Code	Points
Type I/III:	< 10 %	<input type="checkbox"/> 41	0
	10 % to < 50 %	<input type="checkbox"/> 42	10
	> 50%	<input checked="" type="checkbox"/> 43	20
Type II:	< 10 %	<input type="checkbox"/> 51	0
	10 % to < 50 %	<input type="checkbox"/> 52	20
	> 50 %	<input type="checkbox"/> 53	30

Code Checked from Section A or B: 43

**Total Points Factor 2: 20**



## NPDES PERMIT RATING WORK SHEET

**FACTOR 3: Conventional Pollutants**

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) ☐ BOD ☐ COD ☐ Other: \_\_\_\_\_

Permit Limits: (check one)

		Code	Points
<input type="checkbox"/>	< 100 lbs/day	1	0
<input type="checkbox"/>	100 to 1000 lbs/day	2	5
<input type="checkbox"/>	> 1000 to 3000 lbs/day	3	15
<input type="checkbox"/>	> 3000 lbs/day	4	20

Code Number Checked: NA**Points Scored:** 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)

		Code	Points
<input type="checkbox"/>	< 100 lbs/day	1	0
<input type="checkbox"/>	100 to 1000 lbs/day	2	5
<input type="checkbox"/>	> 1000 to 5000 lbs/day	3	15
<input type="checkbox"/>	> 5000 lbs/day	4	20

Code Number Checked: NA**Points Scored:** 0C. Nitrogen Pollutants: (check one) ☐ Ammonia ☐ Other: \_\_\_\_\_

Permit Limits: (check one)

	Nitrogen Equivalent	Code	Points
<input type="checkbox"/>	< 300 lbs/day	1	0
<input type="checkbox"/>	300 to 1000 lbs/day	2	5
<input type="checkbox"/>	> 1000 to 3000 lbs/day	3	15
<input type="checkbox"/>	> 3000 lbs/day	4	20

Code Number Checked: NA**Points Scored:** 0**Total Points Factor 3:** 0**FACTOR 4: Public Health Impact**

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

☐ YES; (If yes, check toxicity potential number below)☒ NO; (If no, go to Factor 5)

Determine the *Human Health* potential from Appendix A. Use the same SIC doe and subcategory reference as in Factor 1. (Be sure to use the *Human Health* toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	0	<input type="checkbox"/> 7.	7	15
<input type="checkbox"/> 1.	1	0	<input type="checkbox"/> 4.	4	0	<input type="checkbox"/> 8.	8	20
<input type="checkbox"/> 2.	2	0	<input type="checkbox"/> 5.	5	5	<input type="checkbox"/> 9.	9	25
			<input type="checkbox"/> 6.	6	10	<input type="checkbox"/> 10.	10	30

Code Number Checked: NA**Total Points Factor 4:** 0

## NPDES PERMIT RATING WORK SHEET

**FACTOR 5: Water Quality Factors**

- A. *Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been to the discharge*

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

- B. *Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?*

	Code	Points
<input checked="" type="checkbox"/> YES	1	0
<input type="checkbox"/> NO	2	5

- C. *Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?*

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

Code Number Checked: A 2 B 1 C 2  
**Points Factor 5:** A 0 + B 0 + C 0 = 0

**FACTOR 6: Proximity to Near Coastal Waters**

- A. Base Score: Enter flow code here (from factor 2) 43

Check appropriate facility HPRI code (from PCS):

HPRI#	Code	HPRI Score
<input type="checkbox"/> 1	1	20
<input type="checkbox"/> 2	2	0
<input type="checkbox"/> 3	3	30
<input checked="" type="checkbox"/> 4	4	0
<input type="checkbox"/> 5	5	20

HPRI code checked : 4

Base Score (HPRI Score): 0 X (Multiplication Factor) 0.10 = 0

Enter the multiplication factor that corresponds to the flow code: 0.10

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

- B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

Code	Points
<input type="checkbox"/> 1	10
<input type="checkbox"/> 2	0

- C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)?

Code	Points
<input type="checkbox"/> 1	10
<input type="checkbox"/> 2	0

Code Number Checked: A 4 B NA C NA  
**Points Factor 6:** A 0 + B 0 + C 0 = 0

## NPDES PERMIT RATING WORK SHEET

## SCORE SUMMARY

<u>Factor</u>	<u>Description</u>	<u>Total Points</u>
1	Toxic Pollutant Potential	0
2	Flows / Streamflow Volume	20
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	0
6	Proximity to Near Coastal Waters	0
TOTAL (Factors 1 through 6)		<b>20</b>

S1. Is the total score equal to or greater than 80 ☐ YES; (Facility is a Major) ☒ NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

☒ NO

☐ YES; (Add 500 points to the above score and provide reason below)

Reason:

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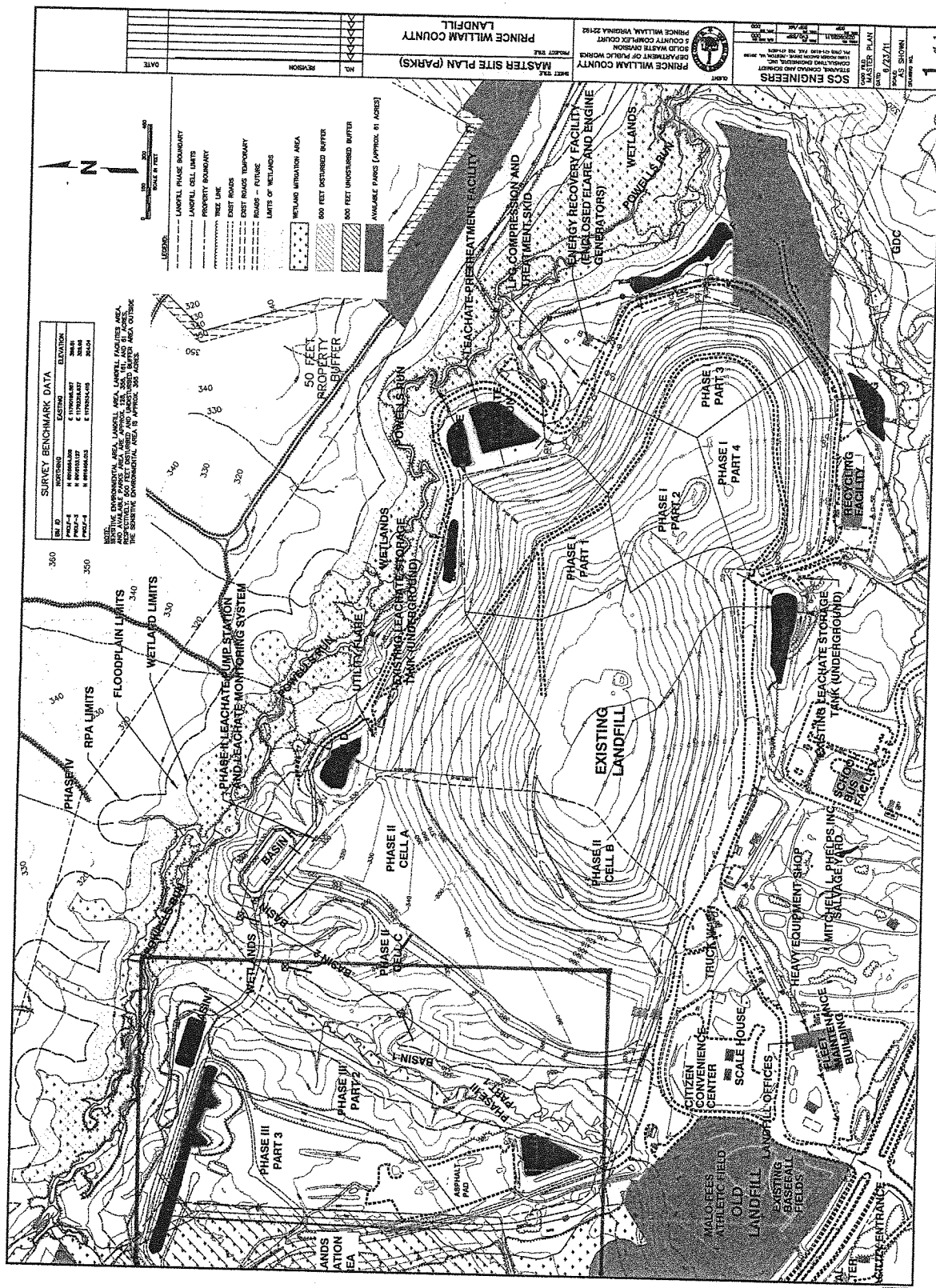
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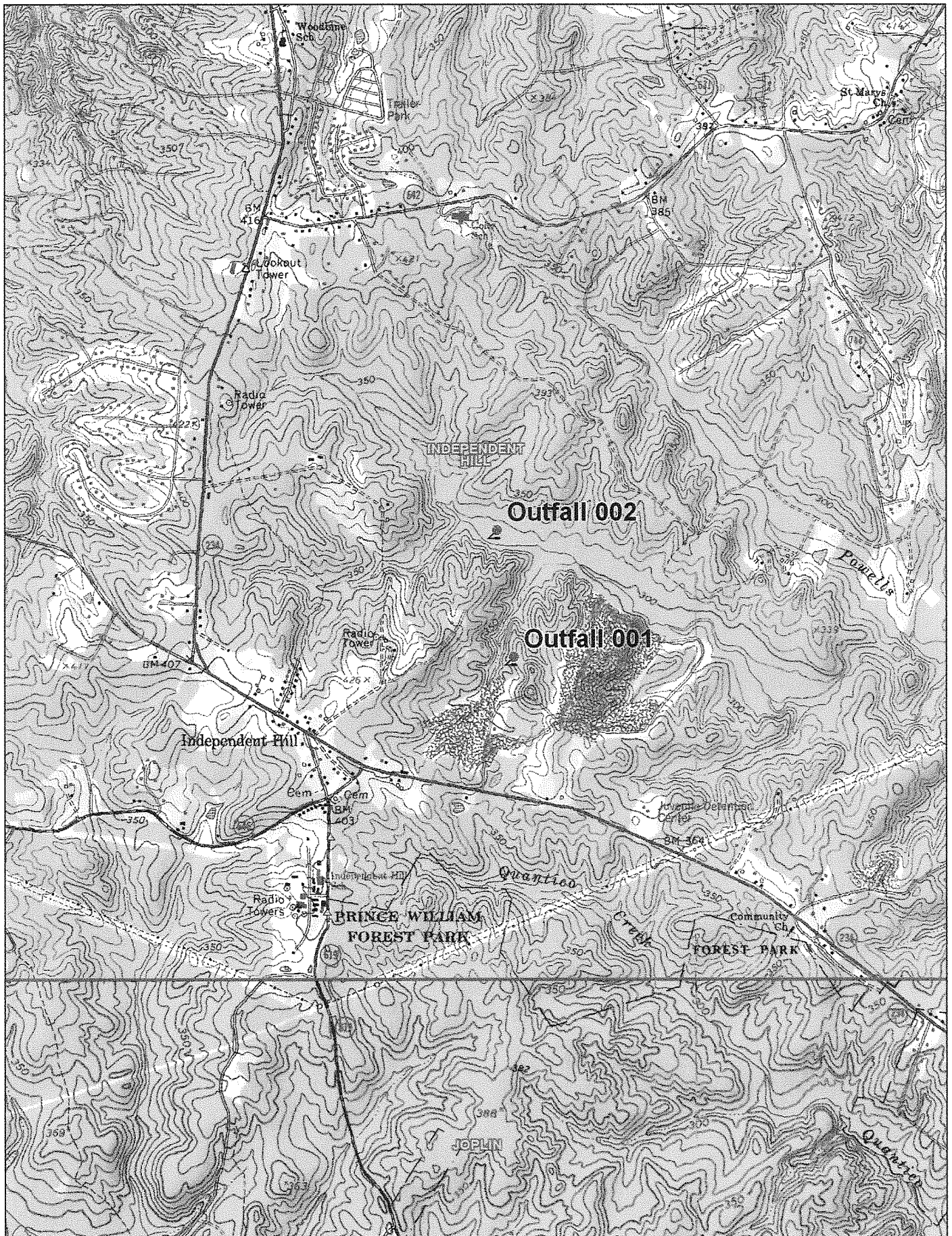
NEW SCORE : 20  
 OLD SCORE : 20

Permit Reviewer's Name : Susan Mackert  
 Phone Number: (703) 583-3853  
 Date: October 24, 2011



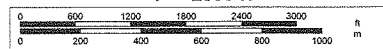
YARD  
WASTE  
FACILITY

↑



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www.delorme.com

Scale 1 : 25,000  
1" = 2080 ft



The facilities and monitoring stations listed below either discharge to or are located within the waterbody VAN-A26R and discharge to or are located on a receiving stream other than Powells Creek or an unnamed tributary to Powells Creek.

1aPOW009.08	DEQ monitoring station located at Lake Montclair.
VA0002151	U.S. Marine Corp Base Quantico – NREAB Industrial (Chopawamsic Creek)
VA0002151	U.S. Marine Corp Base Quantico – NREAB Industrial (Chopawamsic Creek, UT)
VA0028363	U.S. Marine Corp Base Quantico – Mainside STP (Quantico Bight)
VAG406114	Widewater Volunteer Fire Department (Potomac River, UT)
VAG110092	Virginia Concrete Company, Incorporated - Dumfries (Quantico Creek)
VAG110097	Colonial Concrete (Quantico Creek, UT)
VAR051009	LKQ Greenleaf Dumfries (Quantico Creek, UT)
VAR051073	Potomac CDD Landfill (Quantico Creek, UT)
VAR051810	U.S. Marine Corp Base Quantico – Mainside STP (Quantico Bight)



To: Susan Mackert  
From: Katie Conaway

Date: Revised – November 29, 2011  
Subject: Planning Statement for Prince William County Yard Waste Composting Facility  
Permit Number: VA0086797

Discharge Type: Storm Water

**Outfall 001:**

Receiving Stream: UT to Powells Creek  
Discharge Flow: Variable  
Latitude/Longitude: 38°38'20" / -77°25'38"  
Streamcode: 1aXHI  
Waterbody: VAN-A26R  
Water Quality Standards: Class III, Section 7. Special Standards: b.  
Rivermile: 0.44  
Drainage Area: 0.17 mi<sup>2</sup>

**Outfall 002:**

Receiving Stream: UT to Powells Creek  
Discharge Flow: Variable  
Latitude/Longitude: 38°38'40" / -77°25'41"  
Streamcode: 1aXHH  
Waterbody: VAN-A26R  
Water Quality Standards: Class III, Section 7. Special Standards: b.  
Rivermile: 1.93  
Drainage Area: 1.07 mi<sup>2</sup>

1. Is there monitoring data for the receiving stream?

No, there is no monitoring data for either of the receiving streams (UT to Powells Creek XHI and UT to Powells Creek XHH).

- If yes, please attach latest summary.
- If no, where is the nearest downstream monitoring station.

The nearest downstream DEQ monitoring station with ambient data is Station 1aPOW009.99, located on Powells Creek at the Spriggs Road (Route 643) bridge crossing. This station is located approximately 2.83 rivermiles downstream from Outfall 001 and approximately 2.71 rivermiles downstream from Outfall 002. The following is a monitoring summary for Station 1aPOW009.99 as taken from the 2010 Integrated Assessment:

*Class III, Section 7, special stds. b.*

DEQ ambient water quality monitoring station 1aPOW009.99, at Route 643 (Spriggs Road).

*The aquatic life and wildlife uses are considered fully supporting. During a previous assessment cycle, citizen monitoring finds a medium probability of adverse conditions for biota, noted by an observed effect for the aquatic life use, which will remain. There is insufficient information to determine support for the recreation use. The fish consumption use was not assessed.*

2. Is the receiving stream on the current 303(d) list?

No, neither receiving stream (UT to Powells Creek XHI and UT to Powells Creek XHH) is on the 303(d) list.

- If yes, what is the impairment?

N/A

- Has the TMDL been prepared?

N/A

- If yes, what is the WLA for the discharge?

N/A

- If no, what is the schedule for the TMDL?

N/A

3. If the answer to (2) above is no, is there a downstream 303(d) listed impairment?

Yes. Both the tidal and non-tidal portions of Powells Creek are listed with impairments. In addition, Lake Montclair is also listed as impaired.

- If yes, what is the impairment?

**Lake Montclair - Fish Consumption Use Impairment (Mercury):** Excursions above the water quality criterion based fish tissue value (TV) of 300 parts per billion (ppb) for mercury in fish tissue were recorded in three species of fish (9 total samples): largemouth bass (2006), channel catfish (2006) and black crappie (2006) collected at monitoring station 1aPOW009.08. This impairment is located approximately 5.4 rivermiles downstream from the Outfalls for VA0086797.

**Lake Montclair - Fish Consumption Use Impairment (PCBs):** Excursions above the water quality criterion based fish tissue value (TV) of 20 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in fish tissue were recorded in three species of fish (4 total samples): carp (2004), brown bullhead catfish (2004) and channel catfish (2004, 2006) collected at monitoring station 1aPOW009.08. This impairment is located approximately 5.4 rivermiles downstream from the Outfalls for VA0086797.



**Powells Creek (Non-Tidal) Recreation Use Impairment:** Powells Creek is listed as impaired on the 3030(d) list. Sufficient excursions from the maximum E. coli bacteria criterion (2 of 13 samples - 15.4%) were recorded at DEQ's ambient water quality monitoring station (1aPOW006.11) at the Northgate Drive crossing to assess this stream segment as not supporting the recreation use goal for the 2010 water quality assessment. This impairment is located approximately 7.1 rivermiles downstream from the Outfalls for VA0086797.

**Powells Creek (Tidal) Fish Consumption Use Impairment (PCBs):** The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. The advisory, dated 4/19/99 and modified 12/13/04 and 10/7/09, limits consumption of bullhead catfish, channel catfish less than eighteen inches long, largemouth bass, anadromous (coastal) striped bass, sunfish species, smallmouth bass, white catfish, white perch, gizzard shad, and yellow perch to no more than two meals per month. The advisory also bans the consumption of American eel, carp and channel catfish greater than eighteen inches long. The affected area includes the tidal portions of the following tributaries and embayments from the I-395 bridge (above the Woodrow Wilson Bridge) to the Potomac River Bridge at Route 301: Fourmile Run, Hunting Creek, Little Hunting Creek, Pohick Creek, Accotink Creek, Occoquan River, Neabsco Creek, Powells Creek, Quantico Creek, Chopawamsic Creek, Aquia Creek, and Potomac Creek. This impairment is located approximately 11.5 rivermiles downstream from the Outfalls for VA0086797.

**Powells Creek (Tidal) Fish Consumption Use Impairment (Benzo(k)fluoranthene):** This segment remains on the impaired waters list for the fish consumption use because of the 1996 fish tissue data. Exceedances of the water quality standard criterion based tissue value (TV) of 15 ppb for benzo(k)fluoranthene in fish tissue were recorded during a 1996 sampling event. Exceedances of the TV for benzo(k)fluoranthene were recorded in two species (largemouth bass and sunfish). This impairment is located approximately 13.2 rivermiles downstream from the Outfalls for VA0086797.

- Has a TMDL been prepared?

Lake Montclair - Fish Consumption Use Impairment (Mercury): No.

Lake Montclair - Fish Consumption Use Impairment (PCBs): Yes. EPA Approved 10/31/2007.

Powells Creek (Non-Tidal) Recreation Use Impairment: No.

Powells Creek (Tidal) Fish Consumption Use Impairment (PCBs): Yes. EPA Approved 10/31/2007.

Powells Creek (Tidal) Fish Consumption Use Impairment (Benzo(k)fluoranthene): No.

- Will the TMDL include the receiving stream?

None of the TMDLs specifically included/will include the receiving streams; however, all upstream point source are considered during TMDL development.

- Is there a WLA for the discharge?

No.

- What is the schedule for the TMDL?

Lake Montclair - Fish Consumption Use Impairment (Mercury): TMDL Due by 2022.

Lake Montclair - Fish Consumption Use Impairment (PCBs): EPA Approved TMDL 10/31/2007.

Powells Creek (Non-Tidal) Recreation Use Impairment: TMDL Due by 2014.

Powells Creek (Tidal) Fish Consumption Use Impairment (PCBs): EPA Approved TMDL 10/31/2007.

Powells Creek (Tidal) Fish Consumption Use Impairment (Benzo(k)fluoranthene): TMDL Due by 2014.

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

There is a completed downstream TMDL for the aquatic life use impairment for the Chesapeake Bay. However, the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

While Powells Creek has a downstream impairment listed for PCBs in fish tissue, this facility is not expected to discharge the contaminant of concern and thus, no PCB monitoring is requested.

5. Fact Sheet Requirements – Please provide information on other VPDES permits or VADEQ monitoring stations located within a 2 mile radius of the facility. In addition, please provide information on any drinking water intakes located within a 5 mile radius of the facility.

There are no VADEQ monitoring stations or VPDES permits within a 2 mile radius of this facility. In addition, there are no drinking water intakes within a 5 mile radius of this facility.

# FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: PWC - Yard Waste Composting

Permit No.: VA0086797

Receiving Stream: UT to Powells Run

Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information			Stream Flows			Mixing Information			Effluent Information		
Mean Hardness (as CaCO3) =	mg/L		1Q10 (Annual) =	0 MGD		Annual - 1Q10 Mix =	100 %		Mean Hardness (as CaCO3) =	50 mg/L	
90% Temperature (Annual) =	deg C		7Q10 (Annual) =	0 MGD		- 7Q10 Mix =	100 %		90% Temp (Annual) =	25 deg C	
90% Temperature (Wet season) =	deg C		30Q10 (Annual) =	0 MGD		- 30Q10 Mix =	100 %		90% Temp (Wet season) =	deg C	
90% Maximum pH =	SU		1Q10 (Wet season) =	0 MGD		Wet Season - 1Q10 Mix =	100 %		90% Maximum pH =	7.9 SU	
10% Maximum pH =	SU		30Q10 (Wet season) =	0 MGD		- 30Q10 Mix =	100 %		10% Maximum pH =	6.2 SU	
Tier Designation (1 or 2) =	1		30Q5 =	0 MGD					Discharge Flow =	0.05 MGD	
Public Water Supply (PWS) Y/N? =	n		Harmonic Mean =	0 MGD							
Trout Present Y/N? =	n										
Early Life Stages Present Y/N? =	y										

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Acenaphthene	5	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	na
Acrolein	0	--	--	na	9.3E+00	--	--	na	9.3E+00	--	--	--	--	--	--	na
Acrylonitrile <sup>c</sup>	0	--	--	na	2.5E+00	--	--	na	2.5E+00	--	--	--	--	--	--	na
Aldrin <sup>c</sup>	0	3.0E+00	--	na	5.0E-04	--	--	na	5.0E-04	--	--	--	--	3.0E+00	--	na
Ammonia-N (mg/l) (Yearly)	0	1.01E+01	1.42E+00	na	--	--	--	na	--	--	--	--	--	1.01E+01	1.42E+00	na
Ammonia-N (mg/l) (High Flow)	0	1.01E+01	2.80E+00	na	--	--	--	na	--	--	--	--	--	1.01E+01	2.80E+00	na
Anthracene	0	--	--	na	4.0E+04	--	--	na	4.0E+04	--	--	--	--	--	--	na
Antimony	0	--	--	na	6.4E+02	--	--	na	6.4E+02	--	--	--	--	--	--	na
Arsenic	0	3.4E+02	1.5E+02	na	--	--	--	na	--	--	--	--	--	3.4E+02	1.5E+02	na
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Benzene <sup>c</sup>	0	--	--	na	5.1E+02	--	--	na	5.1E+02	--	--	--	--	--	--	na
Benzidine <sup>c</sup>	0	--	--	na	2.0E-03	--	--	na	2.0E-03	--	--	--	--	--	--	na
Benzo (a) anthracene <sup>c</sup>	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Benzo (b) fluoranthene <sup>c</sup>	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Benzo (k) fluoranthene <sup>c</sup>	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Benzo (a) pyrene <sup>c</sup>	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Bis(2-Chloroethyl) Ether <sup>c</sup>	0	--	--	na	5.3E+00	--	--	na	5.3E+00	--	--	--	--	--	--	na
Bis(2-Chloroisopropyl) Ether <sup>c</sup>	0	--	--	na	6.5E+04	--	--	na	6.5E+04	--	--	--	--	--	--	na
Bis(2-Ethylhexyl) Phthalate <sup>c</sup>	0	--	--	na	2.2E+01	--	--	na	2.2E+01	--	--	--	--	--	--	na
Bromofom <sup>c</sup>	0	--	--	na	1.4E+03	--	--	na	1.4E+03	--	--	--	--	--	--	na
Butylbenzylphthalate	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	na
Cadmium	0	1.8E+00	6.6E-01	na	--	--	--	na	--	--	--	--	--	1.8E+00	6.6E-01	na
Carbon Tetrachloride <sup>c</sup>	0	--	--	na	1.6E+01	--	--	na	1.6E+01	--	--	--	--	--	--	na
Chlordane <sup>c</sup>	0	2.4E+00	4.3E-03	na	8.1E-03	--	--	na	8.1E-03	--	--	--	--	2.4E+00	4.3E-03	na
Chloride	0	8.6E+05	2.3E+05	na	--	--	--	na	--	--	--	--	--	8.6E+05	2.3E+05	na
TRC	0	1.9E+01	1.1E+01	na	--	--	--	na	--	--	--	--	--	1.9E+01	1.1E+01	na
Chlorobenzene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	na

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Chlorodibromomethane <sup>c</sup>	0	--	--	na	1.3E+02	--	--	na	1.3E+02	--	--	--	--	--	--	na
Chloroform	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	na
2-Chloronaphthalene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	na
2-Chlorophenol	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	na
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	8.3E-02	4.1E-02	na
Chromium III	0	3.2E+02	4.2E+01	na	--	3.2E+02	4.2E+01	na	--	--	--	--	--	3.2E+02	4.2E+01	na
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	1.6E+01	1.1E+01	na
Chromium, Total	0	--	--	1.0E+02	--	--	--	na	--	--	--	--	--	--	--	na
Chrysene <sup>c</sup>	0	--	--	na	1.8E-02	--	--	na	1.8E-02	--	--	--	--	--	--	na
Copper	0	7.0E+00	5.0E+00	na	--	7.0E+00	5.0E+00	na	--	--	--	--	--	7.0E+00	5.0E+00	na
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.2E+00	na	1.6E+04	--	--	--	--	2.2E+01	5.2E+00	na
DDD <sup>c</sup>	0	--	--	na	3.1E-03	--	--	na	3.1E-03	--	--	--	--	--	--	na
DDE <sup>c</sup>	0	--	--	na	2.2E-03	--	--	na	2.2E-03	--	--	--	--	--	--	na
DDT <sup>c</sup>	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	2.2E-03	--	--	--	--	1.1E+00	1.0E-03	na
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	1.0E-01	na
Diazinon	0	1.7E-01	1.7E-01	na	--	1.7E-01	1.7E-01	na	--	--	--	--	--	1.7E-01	1.7E-01	na
Dibenz(a,h)anthracene <sup>c</sup>	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
1,2-Dichlorobenzene	0	--	--	na	1.3E+03	--	--	na	1.3E+03	--	--	--	--	--	--	na
1,3-Dichlorobenzene	0	--	--	na	9.6E+02	--	--	na	9.6E+02	--	--	--	--	--	--	na
1,4-Dichlorobenzene	0	--	--	na	1.9E+02	--	--	na	1.9E+02	--	--	--	--	--	--	na
3,3-Dichlorobenzidine <sup>c</sup>	0	--	--	na	2.8E-01	--	--	na	2.8E-01	--	--	--	--	--	--	na
Dichlorobromomethane <sup>c</sup>	0	--	--	na	1.7E+02	--	--	na	1.7E+02	--	--	--	--	--	--	na
1,2-Dichloroethane <sup>c</sup>	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	na
1,1-Dichloroethylene	0	--	--	na	7.1E+03	--	--	na	7.1E+03	--	--	--	--	--	--	na
1,2-trans-dichloroethylene	0	--	--	na	1.0E+04	--	--	na	1.0E+04	--	--	--	--	--	--	na
2,4-Dichlorophenol	0	--	--	na	2.9E+02	--	--	na	2.9E+02	--	--	--	--	--	--	na
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
1,2-Dichloropropane <sup>c</sup>	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	na
1,3-Dichloropropane <sup>c</sup>	0	--	--	na	2.1E+02	--	--	na	2.1E+02	--	--	--	--	--	--	na
Dieldrin <sup>c</sup>	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.6E-02	na	5.4E-04	--	--	--	--	2.4E-01	5.6E-02	na
Diethyl Phthalate	0	--	--	na	4.4E+04	--	--	na	4.4E+04	--	--	--	--	--	--	na
2,4-Dimethylphenol	0	--	--	na	8.5E+02	--	--	na	8.5E+02	--	--	--	--	--	--	na
Dimethyl Phthalate	0	--	--	na	1.1E+06	--	--	na	1.1E+06	--	--	--	--	--	--	na
Di-n-Butyl Phthalate	0	--	--	na	4.5E+03	--	--	na	4.5E+03	--	--	--	--	--	--	na
2,4 Dinitrophenol	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	na
2-Methyl-4,6-Dinitrophenol	0	--	--	na	2.8E+02	--	--	na	2.8E+02	--	--	--	--	--	--	na
2,4-Dinitrotoluene <sup>c</sup>	0	--	--	na	3.4E+01	--	--	na	3.4E+01	--	--	--	--	--	--	na
Dioxin 2,3,7,8- tetrachlorodibenzo-p-dioxin	0	--	--	na	5.1E-08	--	--	na	5.1E-08	--	--	--	--	--	--	na
1,2-Diphenylhydrazine <sup>c</sup>	0	--	--	na	2.0E+00	--	--	na	2.0E+00	--	--	--	--	--	--	na
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	2.2E-01	5.6E-02	na
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	2.2E-01	5.6E-02	na
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	--	--	--	--	2.2E-01	5.6E-02	--
Endosulfan Sulfate	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	na
Endrin	0	8.6E-02	3.6E-02	na	6.0E-02	8.6E-02	3.6E-02	na	6.0E-02	--	--	--	--	8.6E-02	3.6E-02	na
Endrin Aldehyde	0	--	--	na	3.0E-01	--	--	na	3.0E-01	--	--	--	--	--	--	na

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		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Ethylbenzene	0	--	--	na	2.1E+03	--	--	na	2.1E+03	--	--	--	--	--	--	na
Fluoranthene	0	--	--	na	1.4E+02	--	--	na	1.4E+02	--	--	--	--	--	--	na
Fluorene	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	na
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	1.0E-02	na
Heptachlor <sup>c</sup>	0	5.2E-01	3.8E-03	na	7.9E-04	5.2E-01	3.8E-03	na	7.9E-04	--	--	--	--	5.2E-01	3.8E-03	na
Heptachlor Epoxide <sup>c</sup>	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.8E-03	na	3.9E-04	--	--	--	--	5.2E-01	3.8E-03	na
Hexachlorobenzene <sup>c</sup>	0	--	--	na	2.9E-03	--	--	na	2.9E-03	--	--	--	--	--	--	na
Hexachlorobutadiene <sup>c</sup>	0	--	--	na	1.8E+02	--	--	na	1.8E+02	--	--	--	--	--	--	na
Hexachlorocyclohexane	0	--	--	na	4.9E-02	--	--	na	4.9E-02	--	--	--	--	--	--	na
Alpha-BHC <sup>c</sup>	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	na
Hexachlorocyclohexane	0	9.5E-01	na	na	1.8E+00	9.5E-01	--	na	1.8E+00	--	--	--	--	9.5E-01	--	na
Gamma-BHC <sup>c</sup> (Lindane)	0	--	--	na	1.1E+03	--	--	na	1.1E+03	--	--	--	--	--	--	na
Hexachlorocyclopentadiene	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	na
Hexachloroethane <sup>c</sup>	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	2.0E+00	na
Hydrogen Sulfide	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	na
Indeno (1,2,3-cd) pyrene <sup>c</sup>	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Iron	0	--	--	na	9.6E+03	--	--	na	9.6E+03	--	--	--	--	--	--	na
Isophorone <sup>c</sup>	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	0.0E+00	na
Kepon	0	4.9E+01	5.6E+00	na	--	4.9E+01	5.6E+00	na	--	4.9E+01	5.6E+00	--	--	4.9E+01	5.6E+00	na
Lead	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	1.0E-01	na
Malathion	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Manganese	0	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--
Mercury	0	--	--	na	1.5E+03	--	--	na	1.5E+03	--	--	--	--	--	--	na
Methyl Bromide	0	--	--	na	5.9E+03	--	--	na	5.9E+03	--	--	--	--	--	--	na
Methylene Chloride <sup>c</sup>	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	3.0E-02	--	--	--	3.0E-02	na
Methoxychlor	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	0.0E+00	--	--	--	0.0E+00	na
Mirex	0	1.0E+02	1.1E+01	na	4.6E+03	1.0E+02	1.1E+01	na	4.6E+03	--	--	--	--	1.0E+02	1.1E+01	na
Nickel	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Nitrate (as N)	0	--	--	na	6.9E+02	--	--	na	6.9E+02	--	--	--	--	--	--	na
Nitrobenzene	0	--	--	na	3.0E+01	--	--	na	3.0E+01	--	--	--	--	--	--	na
N-Nitrosodimethylamine <sup>c</sup>	0	--	--	na	6.0E+01	--	--	na	6.0E+01	--	--	--	--	--	--	na
N-Nitrosodiphenylamine <sup>c</sup>	0	--	--	na	5.1E+00	--	--	na	5.1E+00	--	--	--	--	--	--	na
N-Nitrosodi-n-propylamine <sup>c</sup>	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	na	--	--	2.8E+01	6.6E+00	--	2.8E+01	6.6E+00	na
Nonylphenol	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	6.5E-02	1.3E-02	--	6.5E-02	1.3E-02	na
Parathion	0	--	1.4E-02	na	6.4E-04	--	1.4E-02	na	6.4E-04	--	--	--	--	--	1.4E-02	na
PCB Total <sup>c</sup>	0	3.9E+00	3.0E+00	na	3.0E+01	3.9E+00	3.0E+00	na	3.0E+01	--	--	--	--	3.9E+00	3.0E+00	na
Pentachlorophenol <sup>c</sup>	0	--	--	na	8.6E+05	--	--	na	8.6E+05	--	--	--	--	--	--	na
Phenol	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	na
Pyrene	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Radionuclides	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Gross Alpha Activity (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Beta and Photon Activity (mrem/yr)	0	--	--	na	4.0E+00	--	--	na	4.0E+00	--	--	--	--	--	--	na
Radium 226 + 228 (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na
Uranium (ug/l)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	na

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	4.2E+03	2.0E+01	5.0E+00	na	4.2E+03	--	--	--	--	--	--	--	--	2.0E+01	5.0E+00	na	4.2E+03
Silver	0	1.0E+00	--	na	--	1.0E+00	--	na	--	--	--	--	--	--	--	--	--	1.0E+00	--	na	--
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,1,2,2-Tetrachloroethane <sup>c</sup>	0	--	--	na	4.0E+01	--	--	na	4.0E+01	--	--	--	--	--	--	--	--	--	--	na	4.0E+01
Tetrachloroethylene <sup>c</sup>	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	--	--	na	3.3E+01
Thallium	0	--	--	na	4.7E-01	--	--	na	4.7E-01	--	--	--	--	--	--	--	--	--	--	na	4.7E-01
Toluene	0	--	--	na	6.0E+03	--	--	na	6.0E+03	--	--	--	--	--	--	--	--	--	--	na	6.0E+03
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Toxaphene <sup>c</sup>	0	7.3E-01	2.0E-04	na	2.8E-03	7.3E-01	2.0E-04	na	2.8E-03	--	--	--	--	--	--	--	--	7.3E-01	2.0E-04	na	2.8E-03
Tributyltin	0	4.6E-01	7.2E-02	na	--	4.6E-01	7.2E-02	na	--	--	--	--	--	--	--	--	--	4.6E-01	7.2E-02	na	--
1,2,4-Trichlorobenzene	0	--	--	na	7.0E+01	--	--	na	7.0E+01	--	--	--	--	--	--	--	--	--	--	na	7.0E+01
1,1,2-Trichloroethane <sup>c</sup>	0	--	--	na	1.6E+02	--	--	na	1.6E+02	--	--	--	--	--	--	--	--	--	--	na	1.6E+02
Trichloroethylene <sup>c</sup>	0	--	--	na	3.0E+02	--	--	na	3.0E+02	--	--	--	--	--	--	--	--	--	--	na	3.0E+02
2,4,6-Trichlorophenol <sup>c</sup>	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	--	--	na	2.4E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Vinyl Chloride <sup>c</sup>	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Zinc	0	6.5E+01	6.6E+01	na	2.4E+01	6.5E+01	6.6E+01	na	2.4E+01	--	--	--	--	--	--	--	--	6.5E+01	6.6E+01	na	2.4E+01
	0			na	2.6E+04			na	2.6E+04	--	--	--	--	--	--	--	--			na	2.6E+04

Notes:

- All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 2C maximum for industries and design flow for Municipalities
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information. Antidegradation WLAs are based upon a complete mix.  
Antidegrad. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic  
= (0.1(WQC - background conc.) + background conc.) for human health
- WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	6.4E+02
Arsenic	9.0E+01
Barium	na
Cadmium	3.9E-01
Chromium III	2.5E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	na
Lead	3.4E+00
Manganese	na
Mercury	4.6E-01
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

DMR QA/QC

Permit #: VA0086797 Facility: Prince William County Yard Waste Compost Facility

Due	Outfall	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max
10-Apr-07	001	FLOW	NULL	NL	NULL	NL
10-May-07	001	FLOW	NULL	NL	NULL	NL
10-Jun-07	001	FLOW	NULL	NL	NULL	NL
10-Jul-07	001	FLOW	NULL	NL	NULL	NL
10-Aug-07	001	FLOW	NULL	NL	NULL	NL
10-Sep-07	001	FLOW	NULL	NL	NULL	NL
10-Oct-07	001	FLOW	NULL	NL	NULL	NL
10-Nov-07	001	FLOW	0.3	NL	0.3	NL
10-Dec-07	001	FLOW	0.3	NL	0.3	NL
10-Jan-08	001	FLOW	0.3	NL	0.3	NL
10-Feb-08	001	FLOW	NULL	NL	NULL	NL
10-Mar-08	001	FLOW	0.3	NL	0.3	NL
10-Apr-08	001	FLOW	NULL	NL	NULL	NL
10-May-08	001	FLOW	0.3	NL	0.3	NL
10-Jun-08	001	FLOW	0.3	NL	0.3	NL
10-Jul-08	001	FLOW	0.3	NL	0.3	NL
10-Aug-08	001	FLOW	0.3	NL	0.3	NL
10-Sep-08	001	FLOW	NULL	NL	NULL	NL
10-Oct-08	001	FLOW	0.02	NL	0.02	NL
10-Nov-08	001	FLOW	NULL	NL	NULL	NL
10-Dec-08	001	FLOW	0.03	NL	0.03	NL
10-Jan-09	001	FLOW	0.03	NL	0.03	NL
10-Feb-09	001	FLOW	0.03	NL	0.03	NL
10-Mar-09	001	FLOW	NULL	NL	NULL	NL
10-Apr-09	001	FLOW	0.03	NL	0.03	NL
10-May-09	001	FLOW	0.03	NL	0.03	NL
10-Jun-09	001	FLOW	NULL	NL	NULL	NL
10-Jul-09	001	FLOW	NULL	NL	NULL	NL
10-Aug-09	001	FLOW	NULL	NL	NULL	NL
10-Sep-09	001	FLOW	NULL	NL	NULL	NL
10-Oct-09	001	FLOW	0.03	NL	0.03	NL

DMR QA/QC (Continued)

Permit #:VA0086797 Facility:Prince William County Yard Waste Compost Facility

Due	Outfall	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max
10-Nov-09	001	FLOW	0.03	NL	0.03	NL
10-Dec-09	001	FLOW	0.02	NL	0.02	NL
10-Jan-10	001	FLOW	0.03	NL	0.03	NL
10-Feb-10	001	FLOW	0.02	NL	0.02	NL
10-Mar-10	001	FLOW	NULL	NL	NULL	NL
10-Apr-10	001	FLOW	0.02	NL	0.02	NL
10-May-10	001	FLOW	NULL	NL	NULL	NL
10-Jun-10	001	FLOW	0.02	NL	0.02	NL
10-Jul-10	001	FLOW	NULL	NL	NULL	NL
10-Aug-10	001	FLOW	0.02	NL	0.02	NL
10-Sep-10	001	FLOW	0.03	NL	0.03	NL
10-Oct-10	001	FLOW	NULL	NL	NULL	NL
10-Nov-10	001	FLOW	0.03	NL	0.03	NL
10-Dec-10	001	FLOW	.03	NL	.03	NL
10-Jan-11	001	FLOW	NULL	NL	NULL	NL
10-Feb-11	001	FLOW	NULL	NL	NULL	NL
10-Mar-11	001	FLOW	.03	NL	.03	NL
10-Apr-11	001	FLOW	NULL	NL	NULL	NL
10-May-11	001	FLOW	0.02	NL	0.02	NL
10-Jun-11	001	FLOW	NULL	NL	NULL	NL
10-Jul-11	001	FLOW	NULL	NL	NULL	NL
10-Aug-11	001	FLOW	NULL	NL	NULL	NL
10-Sep-11	001	FLOW	NULL	NL	NULL	NL



## DMR QA/QC

Permit #:VA0086797

Facility:Prince William County Yard Waste Compost Facility

Due	Outfall	Parameter Description	CONC MIN	Lim Min	CONC MAX	Lim Max
10-Apr-07	001	PH	NULL	6.0	NULL	9.0
10-May-07	001	PH	NULL	6.0	NULL	9.0
10-Jun-07	001	PH	NULL	6.0	NULL	9.0
10-Jul-07	001	PH	NULL	6.0	NULL	9.0
10-Aug-07	001	PH	NULL	6.0	NULL	9.0
10-Sep-07	001	PH	NULL	6.0	NULL	9.0
10-Oct-07	001	PH	NULL	6.0	NULL	9.0
10-Nov-07	001	PH	7.81	6.0	7.81	9.0
10-Dec-07	001	PH	8.08	6.0	8.08	9.0
10-Jan-08	001	PH	8.29	6.0	8.29	9.0
10-Feb-08	001	PH	NULL	6.0	NULL	9.0
10-Mar-08	001	PH	7.1	6.0	7.1	9.0
10-Apr-08	001	PH	NULL	6.0	NULL	9.0
10-May-08	001	PH	5.55	6.0	5.55	9.0
10-Jun-08	001	PH	6.62	6.0	6.62	9.0
10-Jul-08	001	PH	4.97	6.0	4.97	9.0
10-Aug-08	001	PH	7.5	6.0	7.5	9.0
10-Sep-08	001	PH	NULL	6.0	NULL	9.0
10-Oct-08	001	PH	7.47	6.0	7.47	9.0
10-Nov-08	001	PH	NULL	6.0	NULL	9.0
10-Dec-08	001	PH	7.67	6.0	7.67	9.0
10-Jan-09	001	PH	7.43	6.0	7.43	9.0
10-Feb-09	001	PH	7.95	6.0	7.95	9.0
10-Mar-09	001	PH	NULL	6.0	NULL	9.0
10-Apr-09	001	PH	7.35	6.0	7.35	9.0
10-May-09	001	PH	7.74	6.0	7.74	9.0
10-Jun-09	001	PH	NULL	6.0	NULL	9.0
10-Jul-09	001	PH	NULL	6.0	NULL	9.0
10-Aug-09	001	PH	NULL	6.0	NULL	9.0
10-Sep-09	001	PH	NULL	6.0	NULL	9.0
10-Oct-09	001	PH	7.62	6.0	7.62	9.0
10-Nov-09	001	PH	7.57	6.0	7.57	9.0
10-Dec-09	001	PH	7.04	6.0	7.04	9.0

DMR QA/QC Continued  
Permit #:VA0086797

Facility:Prince William County Yard Waste Compost Facility

Due	Outfall	Parameter Description	CONC MIN	Lim Min	CONC MAX	Lim Max
10-Jan-10	001	PH	6.55	6.0	6.55	9.0
10-Feb-10	001	PH	6.49	6.0	6.49	9.0
10-Mar-10	001	PH	NULL	6.0	NULL	9.0
10-Apr-10	001	PH	6.95	6.0	6.95	9.0
10-May-10	001	PH	NULL	6.0	NULL	9.0
10-Jun-10	001	PH	5.92	6.0	5.92	9.0
10-Jul-10	001	PH	NULL	6.0	NULL	9.0
10-Aug-10	001	PH	6.98	6.0	6.98	9.0
10-Sep-10	001	PH	6.60	6.0	6.60	9.0
10-Oct-10	001	PH	NULL	6.0	NULL	9.0
10-Nov-10	001	PH	6.79	6.0	6.79	9.0
10-Dec-10	001	PH	7.02	6.0	7.02	9.0
10-Jan-11	001	PH	NULL	6.0	NULL	9.0
10-Feb-11	001	PH	NULL	6.0	NULL	9.0
10-Mar-11	001	PH	6.41	6.0	6.41	9.0
10-Apr-11	001	PH	NULL	6.0	NULL	9.0
10-May-11	001	PH	6.91	6.0	6.91	9.0
10-Jun-11	001	PH	NULL	6.0	NULL	9.0
10-Jul-11	001	PH	NULL	6.0	NULL	9.0
10-Aug-11	001	PH	NULL	6.0	NULL	9.0
10-Sep-11	001	PH	NULL	6.0	NULL	9.0

90% pH = 7.9 S.U.

10% pH = 6.2 S.U.

DMR QA/QC

Permit #:VA0086797					Facility:Prince William County Yard Waste Compost Facility				
Due	Outfall	Parameter Description	CONC AV(Lim Avg	CONC MA(Lim Max					
10-Oct-07	001	AMMONIA, AS N	NULL	NULL					
10-Jan-08	001	AMMONIA, AS N	0.05	0.05					
10-Apr-08	001	AMMONIA, AS N	0.33	0.33					
10-Jul-08	001	AMMONIA, AS N	<0.05	<0.05					
10-Oct-08	001	AMMONIA, AS N	0.27	0.27					
10-Jan-09	001	AMMONIA, AS N	0.80	0.80					
10-Apr-09	001	AMMONIA, AS N	0.89	0.89					
10-Jul-09	001	AMMONIA, AS N	1.06	1.06					
10-Oct-09	001	AMMONIA, AS N	<0.1	<0.1					
10-Jan-10	001	AMMONIA, AS N	0.18	0.18					
10-Apr-10	001	AMMONIA, AS N	0.33	0.33					
10-Jul-10	001	AMMONIA, AS N	2.08	2.08					
10-Oct-10	001	AMMONIA, AS N	<0.1	<0.1					
10-Jan-11	001	AMMONIA, AS N	<0.1	<0.1					
10-Apr-11	001	AMMONIA, AS N	<0.10	<0.10					
10-Jul-11	001	AMMONIA, AS N	3.47	3.47					

10/24/2011 7:56:43 AM

Facility = PWC - Yard Waste Composting Facility

Chemical = Ammonia

Chronic averaging period = 30

WLAa = 10

WLAc = 1.4

Q.L. = 0.2

# samples/mo. = 1

# samples/wk. = 1

#### Summary of Statistics:

# observations = 10

Expected Value = .371941

Variance = .049802

C.V. = 0.6

97th percentile daily values = .905090

97th percentile 4 day average = .618833

97th percentile 30 day average = .448581

# < Q.L. = 2

Model used = BPJ Assumptions, Type 1 data

No Limit is required for this material

The data are:

0.05

0.33

0.27

0.8

0.89

1.06

0.18

0.33

2.08

3.47

DMR QA/QC

Permit #:VA0086797	Facility:Prince William County Yard Waste Compost Facility				
Due	Outfall	Parameter Description	CONC AVG Lim Avg	CONC MAX Lim Max	
10-Oct-07	001	AMMONIA, AS N	NL	NULL	NL
10-Jan-08	001	AMMONIA, AS N	NL	0.05	NL
10-Apr-08	001	AMMONIA, AS N	NL	0.33	NL
10-Jul-08	001	AMMONIA, AS N	NL	<0.05	NL
10-Oct-08	001	AMMONIA, AS N	NL	0.27	NL
10-Jan-09	001	AMMONIA, AS N	NL	0.80	NL
10-Apr-09	001	AMMONIA, AS N	NL	0.89	NL
10-Jul-09	001	AMMONIA, AS N	NL	1.06	NL
10-Oct-09	001	AMMONIA, AS N	NL	<0.1	NL
10-Jan-10	001	AMMONIA, AS N	NL	0.18	NL
10-Apr-10	001	AMMONIA, AS N	NL	0.33	NL
10-Jul-10	001	AMMONIA, AS N	NL	2.08	NL
10-Oct-10	001	AMMONIA, AS N	NL	<0.1	NL
10-Jan-11	001	AMMONIA, AS N	NL	< 0.1	NL
10-Apr-11	001	AMMONIA, AS N	NL	<0.10	NL
10-Jul-11	001	AMMONIA, AS N	NL	3.47	NL

DMR QA/QC

Permit #:VA0086797	Facility:Prince William County Yard Waste Compost Facility					
Due	Outfall	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max
10-Apr-07	001	FLOW	NULL	NL	NULL	NL
10-May-07	001	FLOW	NULL	NL	NULL	NL
10-Jun-07	001	FLOW	NULL	NL	NULL	NL
10-Jul-07	001	FLOW	NULL	NL	NULL	NL
10-Aug-07	001	FLOW	NULL	NL	NULL	NL
10-Sep-07	001	FLOW	NULL	NL	NULL	NL
10-Oct-07	001	FLOW	NULL	NL	NULL	NL
10-Nov-07	001	FLOW	0.3	NL	0.3	NL
10-Dec-07	001	FLOW	0.3	NL	0.3	NL
10-Jan-08	001	FLOW	0.3	NL	0.3	NL
10-Feb-08	001	FLOW	NULL	NL	NULL	NL
10-Mar-08	001	FLOW	0.3	NL	0.3	NL
10-Apr-08	001	FLOW	NULL	NL	NULL	NL
10-May-08	001	FLOW	0.3	NL	0.3	NL
10-Jun-08	001	FLOW	0.3	NL	0.3	NL
10-Jul-08	001	FLOW	0.3	NL	0.3	NL
10-Aug-08	001	FLOW	0.3	NL	0.3	NL
10-Sep-08	001	FLOW	NULL	NL	NULL	NL
10-Oct-08	001	FLOW	0.02	NL	0.02	NL
10-Nov-08	001	FLOW	NULL	NL	NULL	NL
10-Dec-08	001	FLOW	0.03	NL	0.03	NL
10-Jan-09	001	FLOW	0.03	NL	0.03	NL
10-Feb-09	001	FLOW	0.03	NL	0.03	NL
10-Mar-09	001	FLOW	NULL	NL	NULL	NL
10-Apr-09	001	FLOW	0.03	NL	0.03	NL
10-May-09	001	FLOW	0.03	NL	0.03	NL
10-Jun-09	001	FLOW	NULL	NL	NULL	NL
10-Jul-09	001	FLOW	NULL	NL	NULL	NL
10-Aug-09	001	FLOW	NULL	NL	NULL	NL
10-Sep-09	001	FLOW	NULL	NL	NULL	NL
10-Oct-09	001	FLOW	0.03	NL	0.03	NL

DMR QA/QC (Continued)

Permit #: VA0086797 Facility: Prince William County Yard Waste Compost Facility

Due	Outfall	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max
10-Nov-09	001	FLOW	0.03	NL	0.03	NL
10-Dec-09	001	FLOW	0.02	NL	0.02	NL
10-Jan-10	001	FLOW	0.03	NL	0.03	NL
10-Feb-10	001	FLOW	0.02	NL	0.02	NL
10-Mar-10	001	FLOW	NULL	NL	NULL	NL
10-Apr-10	001	FLOW	0.02	NL	0.02	NL
10-May-10	001	FLOW	NULL	NL	NULL	NL
10-Jun-10	001	FLOW	0.02	NL	0.02	NL
10-Jul-10	001	FLOW	NULL	NL	NULL	NL
10-Aug-10	001	FLOW	0.02	NL	0.02	NL
10-Sep-10	001	FLOW	0.03	NL	0.03	NL
10-Oct-10	001	FLOW	NULL	NL	NULL	NL
10-Nov-10	001	FLOW	0.03	NL	0.03	NL
10-Dec-10	001	FLOW	.03	NL	.03	NL
10-Jan-11	001	FLOW	NULL	NL	NULL	NL
10-Feb-11	001	FLOW	NULL	NL	NULL	NL
10-Mar-11	001	FLOW	.03	NL	.03	NL
10-Apr-11	001	FLOW	NULL	NL	NULL	NL
10-May-11	001	FLOW	0.02	NL	0.02	NL
10-Jun-11	001	FLOW	NULL	NL	NULL	NL
10-Jul-11	001	FLOW	NULL	NL	NULL	NL
10-Aug-11	001	FLOW	NULL	NL	NULL	NL
10-Sep-11	001	FLOW	NULL	NL	NULL	NL

## Public Notice – Environmental Permit

**PURPOSE OF NOTICE:** To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of industrial storm water into a water body in Prince William County, Virginia.

**PUBLIC COMMENT PERIOD:** January 12, 2012 to 5:00 p.m. on February 10, 2012

**PERMIT NAME:** Virginia Pollutant Discharge Elimination System Permit – Industrial Storm Water issued by DEQ, under the authority of the State Water Control Board

**APPLICANT NAME, ADDRESS AND PERMIT NUMBER:** Prince William County, 5 County Complex Court, Suite 250, Woodbridge, VA 22192, VA0086797

**NAME AND ADDRESS OF FACILITY:** Prince William County Yard Waste Composting Facility, 14811 Dumfries Road, Manassas, VA 20112. This facility is an Extraordinary Environmental Enterprise participant in Virginia's Environmental Excellence Program.

**PROJECT DESCRIPTION:** Prince William County has applied for a reissuance of a permit for the public Prince William County Yard Waste Composting Facility. The applicant proposes to release industrial storm water at a varying rate per rain event into a water body. The facility proposes to release the industrial storm water in to an unnamed tributary to Powells Run in Prince William County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH. The permit will also require monitoring for: Total Suspended Solids, Ammonia, Total Phosphorus, BOD<sub>5</sub>, and Acute Toxicity using *P. promelas* and *C. dubia*.

**HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING:** DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

**CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION:** The public may review the documents at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.

Name: Susan Mackert

Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193

Phone: (703) 583-3853 E-mail: [susan.mackert@deq.virginia.gov](mailto:susan.mackert@deq.virginia.gov) Fax: (703) 583-3821



**State "Transmittal Checklist" to Assist in Targeting  
Municipal and Industrial Individual NPDES Draft Permits for Review**

**Part I. State Draft Permit Submission Checklist**

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	Prince William County Yard Waste Composting Facility
NPDES Permit Number:	VA0086797
Permit Writer Name:	Susan Mackert
Date:	October 24, 2011

Major [ ]

Minor [x]

Industrial [x]

Municipal [ ]

**I.A. Draft Permit Package Submittal Includes:**

	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?	X		
9. Permit Rating Sheet for new or modified industrial facilities?	X		

**I.B. Permit/Facility Characteristics**

	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water? (downstream impairment)	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?	X		
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?		X	
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?		X	
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	

<b>I.B. Permit/Facility Characteristics – cont.</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
10. Does the permit authorize discharges of storm water?	X		
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

## Part II. NPDES Draft Permit Checklist

### Region III NPDES Permit Quality Review Checklist – For Non-Municipals

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			X
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?	X		
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production” for the facility (not design)?			X
5. Does the permit contain “tiered” limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?	X		
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		

<b>II.D. Water Quality-Based Effluent Limits – cont.</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?	X		
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?		X	
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

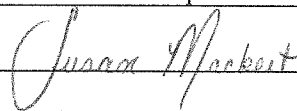
<b>II.E. Monitoring and Reporting Requirements</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			X
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State’s standard practices?		X	

<b>II.F. Special Conditions</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?	X		
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?	X		
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

II.G. Standard Conditions			Yes	No	N/A
1. Does the <b>permit</b> contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?			X		
<b>List of Standard Conditions – 40 CFR 122.41</b>					
Duty to comply	Property rights	Reporting Requirements			
Duty to reapply	Duty to provide information	Planned change			
Need to halt or reduce activity	Inspections and entry	Anticipated noncompliance			
not a defense	Monitoring and records	Transfers			
Duty to mitigate	Signatory requirement	Monitoring reports			
Proper O & M	Bypass	Compliance schedules			
Permit actions	Upset	24-Hour reporting			
		Other non-compliance			
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?			X		

### Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	<u>Susan Mackert</u>
Title	<u>Environmental Specialist II Senior</u>
Signature	<u></u>
Date	<u>October 24, 2011</u>